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GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1736436 seqs, 858457221 residues
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Listing first 45 summaries
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Pred, No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

					SUMMARIES	
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Result		Query				
No.	Score	Match	ore Match Length DB I	DB	ID	Description
C		1 0	1010			
7				77		ridx redumin-like
E				22	AAD03028	Flax 18.6 kDa oleo
ሥ				24	ABL34155	Human immune syste
O 4	51.2	2.5	17421	22	AAS45349	Chemically pretrea
S	51			24	ABL34073	Human immune syste
9	48.6			21	AAZ37082	DNA sequence encod
7	48.6			13		50 kD subunit of S
υ 8	48.2			24		Human immune syste
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/rpt_type= INVERTED /note= "IR2 inverted repeat" 535..545

repeat_unit

/*tag= c

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υ	10	48	2.4	15548	24	ABL34154	immune syst
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ر	7 (-	- [4 C	1911		ABL34257	Human immune syste
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υ	18	7	2.3	15416		ABL34231	immi
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¢	22		, r	1500		AAX99536	Nucleic acid seque
υ	23	46.6	2.5	3991		AAD16633	Human novel protei
	24		2.3	7346		ABL32345	immu
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1	27	8.0	2.0	2365		ABL33469	Human immune syste
o c	0 0	വെ	4.0	0000		ABL32231	Human dene redulat
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) Q	35	າທ	2.5	5378		ABL33878	Human immune syste
	33	4	2.2	5430		AAS46292	Tumour suppressor
υ	34	4	2.5	6249		ABL33215	immune syst
O	35	4	2.2	6317		ABL32408	immune
O	36	母,	2.5	6685		ABL32907	
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	41	* 4	2.2	9510		AAS46438	Tumour suppressor
	42	4	2.2	9510		ABL34563	metastasis
υ	43	-4	2.2	10326		ABL34167	immune sy
O	44	44	2.2	12601		ABL34206	immune sys
O	42	44	7.7	38342		AAS46/46	ramour sappressor
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KW	int	erleukin	alp	na-1-an	titry	psin; anti-obesity pro	tein; haemoglobin;
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//product="Flax legumin-like storage protein"
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//transl_except= (pos:2192..2203, aa:Gly-Glu)
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decoding the alternative version of legumin-like
storage protein fragment #1 (AAY72907)"
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The present sequence is a DNA encoding flax legumin-like seed
storage protein (also referred as linin) fragments #1, #2, #3 and #4.

The present invention relates to a method for expressing non-native genes
in flax seeds. The method comprises introducing a chimeric nucleic acid
construct containing a seed-specific promoter obtained from flax and a
nucleic acid which is non-native to the promoter, into a flax plant cell
and growing the plant cell into a mature flax plant capable of setting
seed, where the nucleic acid is expressed in the seed under the control
of the promoter. The seed-specific promoters obtained from flax are
useful for modifying the protein, oll or polysaccharide composition of
the flax seeds and seeds of other plant species. The promoters facilitate
expression of proteins, including sulphur-rich protein that are found in
lupins or Brazil nuts in a seed deficient in sulphurous amino acids,
cupins or Brazil nuts in a seed deficient in sulphurous amino acids,
including alpha-1-antitrypsin, anticobesity proteins, mammalian proteins,
cupinants and proteins of industrial value such as alpha-amylase,
surfactuants and proteins of industrial value such as alpha-amylase,
are proteins, human serum albumin, insulin, lactoferrin, mayolalucosidaes, catalase, cellobiohydrolase, pectinases,
                                                                                                                                                                                                                     Expressing non-native genes in flax seeds and seeds of other plant species for altering the seed oil and protein composition in the seeds, comprises using seed-specific promoters obtained from flax -
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                                         (SEMB-) SEMBIOSYS GENETICS INC.
(CSIR ) COMMONWEALTH SCI & IND RES ORG.
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30-MAY-2000; 2000CA-2310304.
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42	48 48	54	60	99	72	78	84 84	06	96	102	108	114	120	126	132	138	14,	15(
qq	QY DP	oy Ob	Oy Dp	QY Dp	Qy Db	δλ	Oy Db	Qy Db	Qy Db	QY Db	Qy Db	Qy Db	Qy	Qy Db	QY Db	Qy Dp	Oy Dp	QY

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Flax; seed-specific promoter; oleosin protein; seed oil; vaccine; protein expression; anticoagulant; cytokine; growth factor; pectinase; interleukin; alpha-1-antitrypsin; anti-obesity protein; haemoglobin; serum albumin; insulin; lactoferrin; myoglobin; pulmonary surfactant; alpha amylase; ds.
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                                                                   1861 cgtgttacaaaatgaaacccatgcatccatgcaaactgaagaatggcgcaagaaccttc 1920
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                                                                                                                                                                                                                                                                             1921 occtocatttottatgtggggggcatccatttcaccatctcccggctataaaacaccccca 1980
                   /rpt_type= DIRECT
/note= "R3 direct repeat"
1281..1290
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/note= "R1 direct repeat"
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/note= "R3 direct repeat"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                 Flax 18.6 kDa oleosin protein DNA.
                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                      AAD03028 standard; DNA; 3501
                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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/rpt_type= DIRECT

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The present sequence is a DNA encoding flax 18.6 kDa oleosin protein. The present invention relates to a method for expressing non-native genes in flax seeds. The method comprises introducing a chimeric nucleic acid construct containing a seed-specific promoter obtained from flax and a nucleic acid which is non-native to the promoter, into a flax plant cell and growing the plant cell into a mature flax plant capable of setting and growing the plant cell into a mature flax plant capable of setting caed, where the nucleic acid is expressed in the seed under the control of the promoter. The seed-specific promoters obtained from flax are useful for modifying the protein, oll or polysaccharide composition of the flax seeds and seeds of other plant species. The promoters facilitate expression of proteins, including sulphur-rich protein that are found in lupins or Brazil nuts in a seed deficient in sulphurous amino acids, peptides having pharmaceutical value such as anticoagulants, antibodies, vaccines, cytckines, growth factors, interleukins, mammalian proteins, including albma-1-antitrypsin, anti-obesity proteins, hammaglobin, bulmonary surfactants and proteins insulin, lactoferrin, myoglobin, pulmonary curfactants and proteins (atalase, cellobiohydrolase, pectinases,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Expressing non-native genes in flax seeds and seeds of other plant species for altering the seed oil and protein composition in the seeds, comprises using seed-specific promoters obtained from flax -
                                                                                                                                                                                                                                                                                                                                                                       /product= "Flax 18.6kDa oleosin protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Van Rooijen G, Moloney MM, Singh S;
                                           /rpt_type= DIRECT
/note= "R2 direct repeat"
'note= "R4 direct repeat"
                                                                                                                                                                                                                                                                                                                        direct repeat"
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1486
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direct repeat"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SEMB-) SEMBIOSYS GENETICS INC
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99US-0161722.
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/note= "R5
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1853..2395
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               1342..1351
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P-PSDB; AAY72900.
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                                                     523 tectagagaaaagggaagtegatetetgagtattgaaategaagtgeaeatttttttea 582
                                                                                583 acgigiccaaicaaiccacaaaacaaagcagaagacagaicagitaaictiicaiactiataciga 642
                                                                                                                                                                   474 acatgloccalcacaccacatataaagcaalagtligggagettlicatatligaaacgg 533
                                                                                                                                                                                                          643 caagtaataglettacegteatgealaataaegtetegtteetteaagaggggtttteeg 702
                                                                                                                                                                                                                               703 acatecataaegaeeegaageeteatgaaageattagggaagaaettttggttettettg 762
                                                                                                                                                                                                                                                                                                                                                                   763 tcatggcctttataggtgtcagccgagctcgccaattcccgtccgactggctccgcaaaa 822
                                                                                                                                                                                                                                                                                                                                                                                                                                              823 tattcgaacggcaagttatggacttgcaaccataactccacggtattgagcaggacctat 882
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                                                                                                                                                                                                                                                                                                                          592 gcatccattcgggctcagaagcacatcaaagggatctctccatcgtagtattgggtcgtg 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal cytosine methylation
              2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiarteriosclerotic; antianaemic; cytostatic; nootropic; neuroprotective; anti-HIV; anticonvulsant; ophthalmological; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antiinflammatory; cancer; antiinflammatory; cancer; actiemicases; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; immune system disease; cytosine methylation; antiasthmatic;
                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immune system associated gene SEQ ID NO: 2128.
49.1%; Pred. No. 2.5e-05;
tive 0; Mismatches 195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 772 actagagactcaccctaatgcatctca 798
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01-SEP-2000; 2000DE-1043826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-2002 (first entry)
                  190; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (EPIG-) EPIGENOMICS AG
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  Best Local Similarity
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                        Matches
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Claim 1; SEQ ID NO 2128; 32pp + Sequence Listing; German.

3.0%; Score 61; DB 22; Length 3501;

Query Match

 $us-09-645-593-8_copy_1_2040.rng$

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     The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders,
                                                                                                                                                                                                                                                                                                                            including eye diseases such as retinopathy, neovascular plaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid leukaemia, Alzheimer's disease, AIDS, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chemically pretreated complementary DNA associated with cell cycle #27.
                                                                                                                                                                                                                                                                                                                                                               1547 aatttaacttttagactttatatatagttttaataactaagtttaaccactctattattt 1606
                                                                                                                                                                                                                                                                                                                                                                                                                                   1607 atatcgaaactatttgtatgtctcccctctaaataaacttggtattgtgtttacagaacc 1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cell cycle; human; CpG dinucleotide; cytosine methylation; HIV; aging;
                                                                                                                                                                                                                                                                                            1487 tacatctcttaagaaataatgtaacccctttagactttatatatttgcaattaaaaaaat 1546
                                                                                                                                                                                                                                                        0; Gaps
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                                                                                                                                                                                                                        DB 24; Length 15548;
                                                                                                                                                                 Sequence 15548 BP; 4209 A; 247 C; 2903 G; 8189 T; 0 other;
                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                          0.011;
                                                                                                                                                                                                                    Score 51.8; DI
Pred. No. 0.01:
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAS45349 standard; DNA; 17421 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12837 tatatatatattcgtata 12855
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                                                                                                                                                                                                                        2.5%;
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06-APR-2000; 2000DE-1019058.
07-APR-2000; 2000DE-1019173.
30-JUN-2000; 2000DE-1035529.
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                                                                                                                                                                                                                                                          107; Conservative
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                                                                                                                                                                                                                                       Local Similarity
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                                                                                                                                                                                                                          Query Match
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                                                                                                                                                                                                                                                            Matches
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Sequences AAS45296-AAS4550 represent chemically pretreated genomic DNA molecules associated with the cell cycle and specific PCR primers of the invention. The sequences are useful for detecting the methylation state of all CPG dinucleotides in a sequence and therefore for analysing associated diseases. By analysing cytosine methylations in the pretreated DNA, genetic and/or epigenetic parameters for the diagnosis and therapy of existing diseases or the predisposition to specific diseases can be ascertained. The parameters may be compared to another set of genetic diagnosis and/or prognosis events which are disadvantageous to patients. The sequences of the invention are useful for the diagnosis and therapy of HIV infection, neurodegenerative disorders, graft-versus-host disease, affiny, glomerular disease, Lewy body disease, arthritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1675 aataatcaatactcaactgaagtttgtgcagttaattgaagggattaacggccaaaaigc 1734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1570 AATACTATAAACCCAACATTACAATATTATAATTACTTACATAAC-TTCAAATCTC 1512
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; immune system disease; cytosine methylation; antiasthmatic;
arteriosclerosis comprising fragments of chemically modified genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiarteriosclerotic; antianaemic; cytostatic; nootropic; neuroprotective; anti-HIV; anticonvulsant; ophthalmological; enti-representatio; antidabetic; antipporiatic; antinitatio; antificatio; antinital ammatory; cancer; eye disease; arteriosclerosis; ancute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17421 BP; 4578 A; 328 C; 3973 G; 8502 T; 40 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 49.1%; Pred. No. 0.016;
Matches 163; Conservative 0; Mismatches 168; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immune system associated gene SEQ ID NO: 2046.
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                                                                     Claim 1; SEQ ID No 54; 28pp; English.
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                           associated with cell cycle
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AAQ24134 standard; DNA; 1671
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hes 96; Conservative
                                                                                                                                            /product=
                                                                            Saccharomyces cerevisiae.
                                                                                                                  1431
                                                                                                                                                                                                                                                                                                                                              WPI; 2000-099856/09.
                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAY54040
                                                                                                                                                                                                                                                                 22-MAY-1998;
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                                                                                                                                                                                   EP972836-A2
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                                                                                                                                                                                                                                                                        The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid thenkaemia, Alzhoimer's disease, AnDS, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21465 TCTTTTAAAAATTATAAATTATACTAATTTTTAATTATCAAATAAAAATATTTAAAAAT 21406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21644 ATTTAATTTTTATATATAATCCCTATTAATATCCAAAAATAAATACATTTTATATAAA 21585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21405 ATTTAATTCTTTAAATACAAAAAATATTTAAAAATACTTAAAAACATTAAAAACCTAATTA 21346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1620 tigitatgiciccccictaaataaactiggiatigigittacagaacciataaicaaataa 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1380 attgatcaatttacttccttgcttcaaattctttggcagaaaacaattcattagat 1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1440 ctggaaaccagagtgatgagacggattaagtcagattccaacagagttacatctcttaag 1499
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                                                                                                                                                                                                Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1740 tattatcaaccgaatagattcacactagatggccatttccatcaatatcatcgcc 1794
                                                                                                                                                                                                                                                                                                                                                                                                                                    2.5%; Score 51; DB 24; Length 40862; llarity 46.7%; Pred. No. 0.027; Conservative 0; Mismatches 220; Indels 1.
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40862 BP; 14301 A; 414 C; 7426 G; 18721 T; 0 other;
                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 2046; 32pp + Sequence Listing; German.
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                                                   02-JUL-2001; 2001WO-EP07537.
                                                                                       01-SEP-2000; 2000DE-1043826
                                                                             30-JUN-2000; 2000DE-1032529
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                                                                                                                                             Piepenbrock C,
                                                                                                                    (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                           cytosine methylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
nes 194; Conservé
                                                                                                                                                                        WPI; 2002-130909/17.
WO200200928-A2.
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mitochondria) with universal codons. The endonuclease cuts molecules within sequence AA237078, and is therefore useful in genetic engineering
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1283 ttaaatcatataattgaaataatagagtatttggtttagtattatctgaatatatcaata 1342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New modified endonuclease capable of recognizing specific nucleotide sequence, useful for genetic engineering techniques \dot{}
                                                                         Scel endonuclease; phosphodiester bond; yeast; genetic engineering;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1635 ctaaataaacttggtattgtgtttacagaacctataatcaaataatcaatactca 1689
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nhas 79; Indels
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                                                                                                                  PCR; polymerase chain reaction; gene cloning; ss.
DNA sequence encoding a yeast SceI endonuclease.
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                                                                                                                                                                                                                                                                                                                                                                              "Scel endonuclease"
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                                                                                                                                                                                                                                                                Location/Qualifiers
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                                                                                                                                                                                                                                                                                                           gene encoding 50kD subunit of Scel endonuclease - used for mass 1. of recombinant endonuclease in eg. Sacchromyces IAM4274
                                                                                                                                                                                                                                                                                                                                                    The sequence given encodes the 50kD subunit of endonuclease SceI. Endonuclease SceI can be mass produced from the 50kD subunits expressed from the ENS2 gene. The 50kD subunit was purified by tracting SceI from eq. Sacchromyces IAM4274, and by denaturing the protein and subjecting it to PAGE, or by chromatography on a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1635 ctaaataaacttggtattgtgtttacagaacctataatcaaataatcaatactca 1689
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                          Endonuclease Scel; PAGE; chromatography; ENS2 gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1671 BP; 769 A; 108 C; 113 G; 681 T; 0 other;
                                                                                       /label= Scel_50kD_subunit
                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 2; 4pp; Japanese.
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96; Conservative
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                                             Sacchromyces cerevisae.
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          50 kD subunit of Scel.
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The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders,
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                                                                      Human, immune system disease; cytosine methylation; antiasthmatic; antianeamic; cytostatic; noorropic; neuroprotective; antianeamic; cytostatic; noorropic; neuroprotective; anti-HTV, anticonvulsant; ophthalmological; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antinflammatory; cancer; eye disease; arteriosclerosis; anaemia; autinflammatory; cancer; eye disease; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AlDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
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Human immune system associated gene SEQ ID NO: 1705
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid leukaemia, Alzheimer's disease, AlDS, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
957 ICTCATACCTAAACCTCCCGAATAACTAAAATTACAAATATACACCACTATACCTAACTA 898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal cytosine methylation -
                                                                                                                                                                                                                                                                                                           Human; immune system disease; cytosine methylation; antiasthmatic; antianaemic; cytostatic; nootropic; nentanaemic; cytostatic; nootropic; antianaemic; anticonvulsant; ophthalmologica; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antinfleumatic; cancer; eye disease; arterlosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AlDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.4%; Score 48.2; DB 24; Length 13326;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13326 BP; 4157 A; 115 C; 2657 G; 6397 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 0.086;
0; Mismatches 48; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 1685; 32pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                          Human immune system associated gene SEQ ID NO: 1685.
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                                                                                                                                                               ABL33712 standard; DNA; 13326 BP
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Best Local Similarity 61.65
Matches 77; Conservative
                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENOMICS AG.
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                                       1780 atcaa 1784
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                                                                        897 ATCAA 893
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                                                                                                                                                   ABL33712/c
                                                                                                                                RESULT
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The present invention provides a number of human immune system associated
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acute myeloid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1607 atatogaaactattgtatgtctccctctaaataaacttggtattgttttacagaacc 1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1487 tacatctcttaagaaataatgtaacccctttagactttatatatttgcaattaaaaaaa 1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1547 aatttaacttttagactttatatatagttttaataactaagtttaaccactctattattt 1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid comprising fragment of chemically modified gene, useful
                                                                                                                                                                                                                                                                                                    antiarteriosclerotic; antianaemic; cytostatic; nootropic;
neuroprotective; anti-HIV; anticonvulsant; ophthalmological;
antirheumatic; antiarthritic; antidiabetic; antipsoriatic;
antiinflammatory; cancer; pediasae; arteriosclerosis; anaemia;
acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy;
neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                 Human; immune system disease; cytosine methylation; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            macular degeneration, arteriosclerosis, anaemia, cancer, acute mye leukaemia, Alzheimer's disease, Alzheilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for diagnosis and treatment of diseases associated with abnormal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15548 BP; 5051 A; 247 C; 3385 G; 6865 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches 110; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 2127; 32pp + Sequence Listing; German.
                                                                                                                                                                                                                                             Human immune system associated gene SEQ ID NO: 2127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin K;
                                                                                                                                ABL34154 standard; DNA; 15548 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-JUL-2001; 2001WO-EP07537.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytosine methylation
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1635 ctaaa 1639
                                  6572 CTAAA 6568
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                                                                                                                                                                                                                                                                                                                                                                                                                        gene; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention provides a number of human metastasis associated genes which are modified by cytosine methylation. The sequences can be used in the diagnosis and treatment of cancer. The present sequence is one of the genes of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1464 attaagtcagattccaacagagttacatctcttaagaaataatgtaacccctttagactt 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8352 IATTIATCTCTCATCIATAAAAATAAAATAATAATAATAATATCTACCTCATAAATTATAAT 8293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8412 ATCAACTCCTTCATCAATAACTATACTTCTTTAAAAAATTAATTAACTCTCTCTATACTT 8353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New nucleic acid derived from chemically treated metastasis genes, useful for diagnosis of cancers by analysis of cytosine methylation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            / Match 2.4%; Score 48; DB 24; Length 18585; Local Similarity 57.2%; Pred. No. 0.11; nes 87; Conservative 0; Mismatches 65; Indels 0;
                                                                                                                                                                                                                                                         cytostatic; gene therapy; cancer; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18585 BP; 5806 A; 120 C; 3238 G; 9421 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 162; 23pp + Sequence Listing; English.
                              1667 tataatcaaataatcaatactcaactgaagtttgtgcagttaat 1710
                                                            2712 TATATATATATCCGTATATATATATATATATATATCCGTATAT 2669
                                                                                                                                                                                                                               Human metastasis associated gene SEQ ID NO: 162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Berlin K;
                                                                                                                                       ABL34609 standard; DNA; 18585 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                            2000DE-1019173.
2000DE-1032529.
                                                                                                                                                                                                                                                           Metastasis associated gene; cvtosine methylation; gene;
                                                                                                                                                                                                                                                                                                                                                                                                06-APR-2001; 2001WO-EP03970.
                                                                                                                                                                                                                                                                                                                                                                                                                               06-APR-2000; 2000DE-1019058.
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30-JUN-2000; 2000DE-1032529.
01-SEP-2000; 2000DE-1043826.
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                                                                                                                                                                                                                                                                                                                                         WO200177376-A2.
                                                                                                                                                                                                                                                                                                             Homo sapiens
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                                                                                                                                                                       ABL34609;
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The present invention provides a number of human immune system associated
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                                                                                                                                 Human; immune system disease; cytosine methylation; antiasthmatic; antiarteriosclerotic; antianaemic; cytostatic; nootropic; neuroprotective; anti-HIV; anticonvulsant; ophthalmological; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antificlammatory; cancer; eye disease; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AlDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for diagnosis and treatment of diseases associated with abnormal cytosine methylation
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                                                                Human immune system associated gene SEQ ID NO: 1458.
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26-MAR-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
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ABL33485 standard; DNA; 13202 BP

ABL33485/C ID ABL33

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1574 ttttaataactaagtttaaccactctattatttatatcgaaactatttgtatgtctcccc 1633
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1614 aactatttgtatgtctcccctctaaataaacttggtattgtgtttacagaacctataatc 1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          117 tgtaaatattttttttttctaaatattaaatatttaagttgaaactacaaatttataaaaat 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         236 ATTITATTTTATTTTTTTTTTTAAAACGATATATCACTCCTACTACCAAACTAAAATA 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 It is derived from the peroxidase isozyme gene and has strong promoter activity in plants and yeast. This sequence can be used in expression vectors for various kinds of foreign genes eg. betaglucuronidase, peroxidase, as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence given is a DNA fragment which has promoter activity.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA fragment with good promoter activity in plant cells - used for expression vector of various kinds of foreign gene
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0; Mismatches 78; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 532 BP; 210 A; 71 C; 58 G; 193 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Promoter activity; expression vector; ss.
                                                                                                                                                                                                                                                                                                                                                                                             Peroxidase isozyme gene fragment.
                                                                                            1674 aaataatcaatactcaactga 1694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 1; 7pp; Japanese.
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                                                                                                                                                                                                                                                      BP.
                                                                                                                                      176 CAATAATACAATCTCGACTCA 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90JP-0244779.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90JP-0244779.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57.1%;
                                                                                                                                                                                                                                                      AAQ24835 standard; DNA; 532
                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 57.1
hes 105; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Armoracia rusticana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1992-189675/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TOYM ) TOYOBO KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1694 aaqt 1697
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JP04126088-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                 25-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-APR-1992
                                                                                                                                                                                                                                                                                                  AAQ24835;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid relukaemia, Alzheimer's disease, Alls, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1174 AAATTTTATATAAATTAAAAATTCAAACTCTAAAATCAAACTATAAATACCAAACGTT 1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                              antiarteriosclerotic; antianaemic; cytostatic; nootropic; neuroprotective; anti-HIV; anticonvulsant: ophthalmological; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antiinflammatory; cancer disease; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                                                                                                                          Human; immune system disease; cytosine methylation; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match 2.3%; Score 47.4; DB 24; Length 16545; Local Similarity 52.2%; Pred. No. 0.15; es 105; Conservative 0; Mismatches 96; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16545 BP; 4471 A; 220 C; 3934 G; 7918 T; 2 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 23; 32pp + Sequence Listing; German.
                                              1695 agtttgtgcagttaattgaagggattaacggccaaaatgcact 1737
                                                                         Human immune system associated gene SEQ ID NO: 23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
                                                                                                                                                                                                          ABL32050 standard; DNA; 16545 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUN-2000; 2000DE-1032529
01-SEP-2000; 2000DE-1043826
                                                                                                                                                                                                                                                                                                  26-MAR-2002 (first entry)
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cytosine methylation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JAN-2002.
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ga aa

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Horseradish peroxidase; isozyme; promoter activity; transgenic plant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents a DNA fragment of the horseradish peroxidase isozyme gene. The fragment has promoter activity. The invention relates to a DNA fragment derived from the horseradish peroxidase isozyme gene. The fragment can be inserted into a vector, which when expressed in a plant cell exhibits promoter activity. The promoter activity is at least 4 times higher than the cauliflower mosaic virus 35s promoter. An expression vector containing the DNA fragment can be used to transform plants and cause the expression of heterogenes.
                                                                                                                                                                                                                                                                                                                                                                                      A DNA fragment, from horseradish peroxidase isozyme gene, having promoter activity - useful in an expression vector which can express various heterogenes
                                                                                Horseradish peroxidase isozyme gene promoter fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 532 BP; 210 A; 71 C; 58 G; 193 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 6; 7pp; Japanese.
                                                                                                                                                                                                                                                      99JP-0196728.
                                                                                                                                                                                                                                                                                      90JP-0244779.
                                                20-JUN-2000 (first entry)
                                                                                                                                                     Armoracia rusticana.
                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-295783/26.
                                                                                                                                                                                                                                                                                                                        (TOYM ) TOYOBO KK.
                                                                                                                                                                                   JP2000041688-A.
                                                                                                                                                                                                                                                      14-SEP-1990;
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                                                                                                                                                                                                                      15-FEB-2000
                AA298840;
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Search completed: August 25, 2002, 17:21:01 Job time: 14769 sec

Sequence 1137, Ap Sequence 288, App Sequence 1, Appli Sequence 2, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 2, Appli Sequence 51, Appli Sequence 12, Appli Sequence 2, Appli Sequence 3, Appli

Appl 17, App]

Sequence 17 Sequence Sequence Sequence

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APPLICANT: VAN OOJEN, ALBERT J. J.
APPLICANT: RIETVELD, RRIJN
APPLICANT: RIETVELD, RRIJN
APPLICANT: PEN, JAN
APPLICANT: PEN, JAN
APPLICANT: SIMONS, PETER C.
APPLICANT: SIMONS, PETER C.
APPLICANT: QUAX, WILHEMUS J.
TITLE OF INVENTION: PRODUCTION OF ENZYMES IN SEEDS AND THEIR
TITLE OF INVENTION: USE
CORRESPONDENCE 333
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 129.6; DB 1; Length 3113;
Pred. No. 2.8e-27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: 0S/08/146,422
FILING DATE: 02-NOV-1993
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
US-08-998-416-305
US-08-998-416-287
US-09-244-796-17
US-08-998-416-1137
US-08-998-416-1137
US-08-602-010A-2
US-08-602-010A-2
US-08-602-010A-2
US-08-680-726A-1
US-08-680-726A-2
US-09-092-409-2
US-09-092-409-2
US-08-680-726A-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: KENNEDY, BILL
REGISTRATION NUMBER: 33,407
REGISTRATION NUMBER: 44615-20011.23
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 813-5600
TELEFAX: (415) 494-0792
                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                            . Cont No. 5543576.
. GENERAL INFORMATION:
APPLICANT: VAN OOLTEN
APPLICANT: PIT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: MORRISON & FOERSTER STREET: 755 Page Mill Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (415) 494-0792
TELEX: 706141
INFORMATION FOR SEQ ID NO: 20: SEQUENCE CHARACTERISTICS:
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TYPE: nucleic acid
STRANDEDNESS: single
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STATE: California
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Best Local Similarity
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94304-1018
       TOPOLOGY:
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US-08-146-428-20
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Patent No.
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                                                                                                                                      (without alignments)
9183.471 Million cell updates/sec
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Sequence 534, App
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Sequence 14,
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                                                                                                                      August 25, 2002, 13:11:16; Search time 133.71 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2,
Sequence 2,
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Sequence 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Issued_Patents_NA:*
11. /cgn2_6/ptodate/2/ina/5A_COMB.seq:*
12. /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3. /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
41. /cgn2_6/ptodata/2/ina/FB_COMB.seq:*
51. /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
61. /cgn2_6/ptodata/2/ina/PcTUS_COMB.seq:*
                                        Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                       GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
                                                                                                                                                                                                                                                                                                       383533 seqs, 122816752 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                        Maximum Match 100%
Listing first 45 summaries
                                                                                        OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                       IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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                                                                                                                                                                                  US-09-645-593-8
4999
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                                      3325 tatctgaccgaccggtttgaattttgtaggaagcgatcaggctgccgcactggaacatca 3384
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0; Mismatches 224; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : 2000 PENNSYLVANIA AVENUE NW WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: VAN OOIJEN, ALBERT J.J.
APPLICANT: NEITVELD, KRIJN
APPLICANT: HOEKBA, ANDREAS
APPLICANT: PEN, JAN
APPLICANT: SIJMONS, PETER C.
APPLICANT: VERWOERD, TEINIS C.
APPLICANT: VERWOERD, TEINIS C.
APPLICANT: QUAX, WILHEMUS J.
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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NAME: MURASHIGE, KATE H.
REGISTRATION NUMBER: 29,959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2916 ATAAAAGAGTAATAATAAT 2935
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  Matches 275; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                    Similarity 55.0%; Pred. No. 2.8e-27; Similarity 55.0%; Pred. No. 2.8e-27; Conservative 0; Mismatches 224; Indels 1;
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Frishauf, Holtz, Goodman, Langer & Chick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: FUKazawa, Chikafusa
TITLE OF INVENTION: Method of Producing
TITLE OF INVENTION: Asparaginyl Endoprotease
REFERENCE/DOCKET NUMBER: 26192-20011.10
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MEDIUM TYPE: Diskette, 3+ inch, 1.4 mb
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Patent No. 5739025
                 LELEPHONE: (202) 887-1500
TELEFAX: (202) 887-0763
TELEX: 90-4030 MESNYOERSWEH
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
TENGTH: 3113 hasser:
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                                                                                                                                                                               LENGTH: 3113 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                              275; Conservative
                                                                                                                                                                                                                                                                  TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10017-2023
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3532 gegagaggtttgagtgggtggegtteaagaceaaegaeaaegegatggtgaaetcgetag 3591
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Frishauf, Holtz, Goodman, Langer & Chick
STREET: 767 Third Avenue
                                                                                                                                                                                3652 tgtcgccggaggaggcgaggaggtgaagttcaacagg 3689
                                                                                                                                                                                                                                                                                                                                                APPLICANT: Fukazawa, Chikafusa
TITLE OF INVENTION: Method of Producing
TITLE OF INVENTION: Asparaginyl Endoprotease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 10017-2023
COMPOTER READABLE FORM:
MEDIUM TYPE: Diskette, 3+ inch, 1.4 mb
COMPUTER: IBM PC
OPERATING SYSTEM: MS DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/091,991
FILING DATE: 12-JULY-1993
ATTORNEY/AGENT INFORMATION:
NAME: BAICH, Richard S.
REGISTRATION NUMBER: 28.180
REFERENCE/DOCKET NUMBER: 930587/HG
TELECHONE: (212) 319-4900
TELECHONE: (212) 319-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SACTI
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,721A
APPLICATION NUMBER: US/08/486,721A
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ORIGINAL SOURCE:
ORGANISM: Oat (Avena sativa, L.)
                                                                                                                                                                                                                                                                                       Sequence 2, Application US/08486721A Patent No. 5739025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 236268
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 1556 base pairs
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EDNESS: double
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IMMEDIATE SOURCE:
LIBRARY: cDNA library
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: c-DNA HYPOTHETICAL:
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                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Fukazav
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US-08-486-721A-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Oat 12S globulin / 11-5 protein Family LOCATION: protein bodies of cotyledonary tissue IDENTIFICATION METHOD:
                            SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,721A
FILING DATE: 7-JUNE-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 930587/HG
TELECOMUNICATION INFORMATION:
TELEFRONE: (212) 319-4900
TELEFAX: (212) 319-5101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       middle stage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FRAGMENT TYPE:
ORIGINAL SOURCE:
ORGANISM: Oat (Avena sativa, L.)
                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/091,991
FILING DATE: 12-JULY-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                     TELEFAX: (41.,
TELEX: 236268
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LEMCTH: 1685 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
                                                                                                                                                                                                                   NAME: Barth, Richard S. REGISTRATION NUMBER: 28,180
                          OPERATING SYSTEM: MS DOS
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HAPLOTYPE: 2n
TISSUE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cotyledon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: C-DNA
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          IBM PC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
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IMMEDIATE SOURCE:
LIBRARY: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAP POSITION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CELL LINE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CELL TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
US-08-486-721A-1
          COMPUTER:
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CLONE: A1B
POSITION IN GENOME:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1191 GTGAAGGATGCCAGTATATCTCATTCAAGACCAACCCAAACTCCATGGTTAGCCACATTG 1250
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                                                                                         NAME/KEY: Oat 12S globulin / 11-S protein family LOCATION: protein bodies of cotyledonary tissue IDENTIFICATION METHOD: OTHER INFORMATION: PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPOTER READBLE FORM:

WEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3652 tgtcgccggaggaggcgaggagggtgaagttcaacagg 3689
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APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
CORRESPONDENCE: 52
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEE: Foley & Lardner: 1800 Diagonal Road, Suite 500 Alexandria
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
FILING DATE:
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APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 14, Application US/08232463 Patent No. 5670367 GENERAL INFORMATION:
CHROMOSOME/SEGMENT: MAP POSITION:
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US-08-486-721A-2
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                                                                                                                                                                                                                                        AUTHORS:
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                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 1.4%; Score 68.8; DB 1; Length 7 Best Local Similarity 7.6%; Pred. No. 3.5e-09; Matches 34; Conservative 235; Mismatches 177; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: DORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOMLPOX VIRUS
NUMBER OF SEQUENCES: 52
                                                           NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 30472/114 IMMU
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Foley & Lardner
STREET: 1800 Diagonal Road, Suite 500
CITY: Alexandria
APPLICATION NUMBER: EP 91 114 300.6 FILING DATE: 26-AUG-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3860 ggaaatgtgtaatgagccagtagccg 3885
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                                                                                                                                                                      TELER: 899149
TELEX: 899149
INFORMATION FOR SEQ ID NO: 14
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
                                                                                                                                                                (703)683-4109
                                                                                                                                                                                                                                                                                     single
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US-08-232-463-14
                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
IMMEDIATE SOURCE:
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US-08-232-463-14
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ATTORNEY/AGENT INFORMATION:
NAME: MUTPHY Jr., Gerald M.
REGISTRATION NUMBER: 28,970
REFERENCE/DOCKET NUMBER: 760-175P
                                                                                                                                                                                                                                                         OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)205-8000
TELEX: 248345
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1240 base pairs
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                                                                                                                                                                                                                    E: Floppy disk
IBM PC compatible
APPLICANT: Maruta, Yoshiyuki
TITLE OF INVENTION: Method fr
TITLE OF INVENTION: Proteins
NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Oryza sativa
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                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                         Falls Church
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleic acid
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                                                                                                                                                                COUNTRY:
                                                                                                                             CITY: 1
STATE:
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                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                                                                                TORNEY/AGEN1 100 CONTROL AND AME: BENT, Stephen A. REGISTRATION NUMBER: 29,768
REGISTRATION NUMBER: 30472/114 IMMU
                                                                                                                                                                                                                                                     APPLICATION NUMBER: EP 91 114 300.6 FILING DATE: 26-AUG-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
                                                                                          PC-DOS/MS-DOS
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         REFERENCE/DOCKET NUMBER: 30. TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (703)683-4109
TELEX: 899149
INPERMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid
EDNESS: single
                                                                                                                                                                               CLASSIFICATION: 435
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US-08-232-463-14
                                                                                            OPERATING SYSTEM:
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                                                                                                                                                                                                                                        FILING DATE:
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Method for Decreasing Seed Storage
Proteins and for Transforming Plants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: The Institute of Physical and Chemical Research
TITLE OF INVENTION: Endonuclease
FILE REFERENCE: PH-651
CURRENT APPLICATION NUMBER: US/09/316,083A
CURRENT FILING DATE: 1999-05-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/142,393
FILING DATE: 24-NOV-1993
                                                                                                                                            ADDRESSEE: Birch, Stewart, Kolasch & Birch
STREET: 8110 Gatehouse Road, Suite 500 East
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Gaps

us-09-645-593-8.rni

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 45.4; DB 4; Length 1431; 53.7%; Pred. No. 0.0075;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Stewart, Thomas S
APPLICANT: Stewart, Thomas V
APPLICANT: O'Sullivan, William J
APPLICANT: O'Sullivan, William J
TITLE OF INVENTION: Nucleotide sequence encoding carbamoyl
TITLE OF INVENTION: phosphate synthetase II
NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Nixon & Vanderhye PC
STREET: 1100 No. 5849573th Glebe Road, 8th Floor
                                                                                                                                                                                                                                                                                                                                       0; Mismatches
EARLIER APPLICATION NUMBER: JP98/141861
EARLIER FILING DATE: 1998-05-22
NUMBER OF SEQ ID NOS: 38
SOFTWARE: PATENTIN VET. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
PAPLICATION NUMBER: US/08/446,855A
FILING DATE: 06-Jul-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Mitchard, Leonard C
REGISTRATION NUMBER: 29.009
REFERENCE/DOCKET NUMBER: 47-80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Application US/08446855A Patent No. 5849573
                                                                                                                                                ORGANISM: Saccharomyces cerevisiae
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TELEPHONE: 703-816-4000
TELEFAX: 703-816-4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 1:
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                                                                                                                                                                                                                                                                                                                                       94; Conservative
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STRANDEDNESS: single
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COMPUTER READABLE FORM:
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US-09-316-083-2
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CLASSIFICATION:
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                                                                                 SEQ ID NO 2
LENGIH: 1431
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                                                                                                                              TYPE: DNA
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3914 ataaatcatgaattttgtggtttttatgtgttttttaaatcatgaattt-taaatttta 3972
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APPLICANT: Stewart et al.
ITILE OF INVENTION: Nucleotide Sequence Encoding Carbamoyl Phosphate
Patent No. 6183996
ITILE OF INVENTION: Synthetase II
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0.9%; Score 43.8; DB 2; Length 8920;
50.2%; Pred. No. 0.087;
tive 0; Mismatches 132; Indels 1
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EARLIER FILING DATE: 1995-07-06
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT FILLING DATE: 1998-09-10
EARLIER APPLICATION NUMBER: PL6380
EARLIER FILING DATE: 1992-12-16
EARLIER PEDLICATION NUMBER: AU93/00617
EARLIER FILING DATE: 1993-12-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/09150741 Patent No. 6183996
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; ORGANISM: Plasmodium falciparum
US-09-150-741-1
                                                         Matches 134; Conservative
                                  Similarity
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US-09-150-741-1/c
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     Query Match
                                  Best Local
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RESULT
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APPLICANT: Callis, Judy
APPLICANT: Worley, Carthy K.
TITLE OF INVENTION: Sequences from Auxin-Induced Gene
TITLE OF INVENTION: Products Targeting Fusion Proteins for Degradation
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OTHER INFORMATION: protein 
OTHER INFORMATION: Anotes gene for PS-IAA6 (indole 
OTHER 
OTHER INFORMATION: Anotes gene for PS-IAA6 (indole 
OTHER 
OTHER INFORMATION: Anotes gene for PS-IAA6 (indole 
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APPLICATION NUMBER: US/09/064,922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor CITY: San Francisco STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            023070-085400US
4153 atactaatactatattaattacta 4179
                                                                                     8533 ATATATATATATATATATATATA 8507
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22-APR-1998
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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NAME: Hyman, Laurence J.
REGISTRATION NUMBER: 35,551
REFERENCE/DOCKET NUMBER: 02307
TELECOMMUNICATION INFORMATION:
TELEFAX: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 5923 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/09064922
Patent No. 6222095
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; OTHER INFORMATION:
US-09-064-922-3
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Best Local Similarity
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94111-3834
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LOCATION: joir
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                                                                                                                                                                                                                                                                         US-09-064-922-3/c
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3926 ttttgtggtttttatgtgtttttttaaatcatgaattttaaattttaaaatttatataaaataatctcc 3985
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                                                                                                                                                                                      APPLICANT: Treacy, Maurice
APPLICANT: Spaulding, Vikki
APPLICANT: Agostino, Michael J.
TITLE OF INVENTION: ENCERTED PROTEINS AND POLYNUCLEOTIDES
TITLE OF INVENTION: ENCODING THEM
NUMBER OF SEQUENCES: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATUR SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Genetics institute, Inc.
STREET: 87 CambridgePark Drive
CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/960,022
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               Sequence 19, Application US/08960022
Patent No. 5976837
GENERAL INFORMATION:
                                                                          Jacobs, Kenneth
MCCOY, John M.
LaVallie, Edward R.
Racie, Lisa A.
Merberg, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Sprunger, Suzanne A.
REGISTRATION NUMBER: 41,323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
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APPLICANT: Philippsen, Peter
APPLICANT: Pohlmann, Rainer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (617) 498-8284
(617) 876-5851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 3319 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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Matches 91; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
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US-08-960-022-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
CLASSIFICATION:
US-08-960-022-19/c
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US-08-998-416-191
                                                                                                       APPLICANT:
                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                             APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Gaps
APPLICANT: Steiner, Sabine
APPLICANT: Wohr, Christine
APPLICANT: Wendland, Jurgen
APPLICANT: Rechilipp
APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
UNDBER OF SEQUENCES: 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

0.8%; Score 42.2; DB 4; Length 663;
Best Local Similarity 49.4%; Pred. No. 0.037;
Matches 132; Conservative 2; Mismatches 130; Indels
                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PF/5-30306/A/CGC1976
                                                                                                                                                                                       SEE: No. 6239264artis Corporation
: 3054 Cornwallis Road
Research Triangle Park
No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/998,416
FILING DATE: 24-DEC-1997
CLASSIFFCATION: 435
PROR APPLICATION DATA:
APPLICATION UNBER: CH 0016/97
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1620 ttgtatgtctcccctctaaataaactt 1646
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF,
TELECOMMULICATION INFORMATION:
TELEPHONE: 919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO: 191:
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MOLECULE TYPE: DNA (genomic)
ORIGINAL SOURCE:
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TYPE: nucleic acid
STRANDEDNESS: single
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US-08-998-416-191
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US-08-998-416-534

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1440 ctggaaaccagagtgatgagacggattaagtcagattccaacagagttacatctcttaag 1499
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                                                                                                                                                                                                                                APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
COMPRER OF SEQUENCES: 1152
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 42; DB 4; Length 854;
48.7%; Pred. No. 0.051;
Live 0; Mismatches 150; Indels
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APPLICATION NUMBER: US/08/998,416 FILING DATE: 24-DEC-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
ATIONERY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-30306/A/CGC1976
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-541-8587
THIPPRAY
                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: No. 6239264artis Corporation STREET: 3054 Cornwallis Road CITY: Research Triangle Park STATE: No. 6239264th Carolina COUNTRY: USA
Sequence 534, Application US/08998416 Patent No. 6239264 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                   APPLICANT: Mohr, Christine
APPLICANT: Wendland, Jurgen
APPLICANT: Knechtle, Philipp
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                                                                                 Philippsen, Peter
Pohlmann, Rainer
Steiner, Sabine
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Matches 145; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              854 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
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MOLECULE TYPE: DI
ORIGINAL SOURCE:
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APPLICANT:
APPLICANT:
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                                                                                                         APPLICANT:
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24004 tgictegeaegegitecaciegeegeegatgaacegaigeigaagagagagagagegeggi 24063
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.8%; Score 41.6; DB 3; Length 68750; Best Local Similarity 47.8%; Pred. No. 1.8; Matches 153; Conservative 0; Mismatches 164; Indels 3; Gaps
Sequence 1. Application US/09335409

Sequence I. No. 6121029

GENERAL INFORMATION:

APPLICANT: Schupp, Thomas

APPLICANT: Moinar, Istvan

APPLICANT: Moinar, Istvan

APPLICANT: Gerlach, Joern

TITLE OF INVENTION: GENES FOR THE BIOSYNTHESIS OF EPOTHILONES

FILE REPERENCE: 4.30582A

CURRENT APPLICATION NUMBER: US/09/335,409

CURRENT APPLICATION NUMBER: US/09/335,409

CURRENT APPLICATION NUMBER: 1999-06-17

NUMBER OF SEQ ID NOS: 30

SEGURANE: PATCHING DATE: 1999-06-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search completed: August 25, 2002, 17:09:06 Job time: 14270 sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Sorangium cellulosum US-09-335-409-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 68750
                                                                      RESULT 15
US-09-335-409-1
                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
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